

polymerizing on the member present in the gas-phase part of the reactor, and a continuous operation can be conducted over long. For example, acrylic acid was reacted with BuOH in the presence of p-toluenesulfonic acid and hydroquinone to give Bu acrylate.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4
 ACCESSION NUMBER: 2003:396830 CAPLUS
 DOCUMENT NUMBER: 138:385915
 TITLE: Method for producing (meth)acrylic acid esters of polyhydric alcohols
 INVENTOR(S): Martin, Friedrich-Georg; Wartini, Alexander; Dernbach, Matthias; Schroeder, Juergen; Sirch, Tilman
 PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany
 SOURCE: PCT Int. Appl., 41 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003042151	A1	20030522	WO 2002-EP12491	20021108
WO 2003042151	C1	20040624		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
DE 10156116	A1	20030626	DE 2001-10156116	20011115
PRIORITY APPLN. INFO.:			DE 2001-10156116 A	20011115

OTHER SOURCE(S): MARPAT 138:385915
 AB (Meth)acrylic acid esters of polyhydric alcs. are manufactured by reacting (meth)acrylic acid and the corresponding polyhydric alcs. in the presence of ≥ 1 acid catalyst and, optionally, ≥ 1 polymerization inhibitor and a solvent, whereby the polyhydric alc. contains <500 ppm HCHO. Thus, trimethylolpropane containing 282 ppm acetal-bound HCHO was esterified with acrylic acid in cyclohexane mixture containing p-MeOC₆H₄OH, H₃PO₂, CuCl₂ and H₂SO₄ to give product having d. 1.1041 g/cm³ and dynamic viscosity 85 mPa·s (23°), vs. d. 1.1153 g/cm³ and dynamic viscosity 246 mPa·s for similar product prepared by use of trimethylolpropane containing 1400 ppm of acetal-bound HCHO.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5
 ACCESSION NUMBER: 2003:166982 CAPLUS
 DOCUMENT NUMBER: 138:188258
 TITLE: Preparation of 2-phenylethyl (meth)acrylate
 INVENTOR(S): Doi, Junichi; Sonobe, Hiroshi; Matsumoto, Satoshi

L16 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 6

ACCESSION NUMBER: 2002:845303 CAPLUS

DOCUMENT NUMBER: 137:338384

TITLE: **Esterification process for the****production of (meth)acrylate esters**

INVENTOR(S): Nestler, Gerhard; Geisendoerfer, Matthias

PATENT ASSIGNEE(S): BASF AG, Germany

SOURCE: Ger. Offen., 12 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10154714	A1	20021107	DE 2001-10154714	20011109
DE 10246869	A1	20030327	DE 2002-10246869	20021008

PRIORITY APPLN. INFO.:

AB The production of (meth)acrylate esters (e.g., 2-ethylhexyl acrylate) by is achieved by acid-catalyzed **esterification** of (meth) acrylic acids (e.g., acrylic acid) with the appropriate alc. (e.g., 2-ethylhexanol) in a homogeneous liquid phase in the presence of a polymerization **inhibitor** (e.g., phenothiazine) and/or an **inhibitor** mixture, one accomplishes the **esterification** (stage 1) in a reaction zone, which is equipped with at least one distillation unit, over which one separates the reaction water as well as olefins, alc., acetic acid esters and propionic acid ester, formed with the **esterification**, condensed and in an aqueous and an organic phase are separated, the discharge from the reaction zone from stage 1 is lead into a catalyst separation stage (stage 2) and into a **esterification**-catalyzed bottoms product and the (meth)acrylate esters head product is separated, from this (meth)acrylate ester-containing head product in a following stage the remaining (meth)acrylate ester-containing stream/current is separated into a light-boiling fraction (stage 4) and the (meth)acrylate ester essentially freed of acetic acid ester and output alc. recycled, from the released acetic acid ester and output alc. the (meth)acrylate ester made from stage 4 in a pure distillation (stage 6) separates from the high-boiling solvents and the high-boiling solvent-containing stream is subjected to a thermal and/or catalytic treatment.

L16 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 7

ACCESSION NUMBER: 2002:403632 CAPLUS

DOCUMENT NUMBER: 136:402195

TITLE: **Transesterification process for****the production of higher alkyl (meth)acrylate esters from lower-alkyl (meth)acrylate esters**

INVENTOR(S): Nestler, Gerhard; Rauh, Ulrich; Schroeder, Juergen

PATENT ASSIGNEE(S): BASF AG, Germany

SOURCE: Ger. Offen., 12 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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